



# **Kansas Medical Assistance Program: Fee-For-Service Program Assessment State Fiscal Year 2017**

Prepared by Health Information Designs, LLC  
Ariane Casey, PharmD

October 2017

---

## Table of Contents

<b>Introduction.....</b>	<b>1</b>
<b>Claims Totals.....</b>	<b>1</b>
Overall Program Totals.....	2
TXIX Program Totals .....	3
ADAPD Program Totals.....	3
MKN Program Totals .....	4
Share of FFS Claims and Claims Cost .....	5
Comparison of Share of FFS Claims and Claims Cost Post-KanCare.....	6
<b>Drug Classification Reporting .....</b>	<b>7</b>
FFS Top Therapeutic Drug Classes.....	8
ADAPD Top Therapeutic Drug Classes .....	10
TXIX Top Therapeutic Drug Classes .....	11
MKN Top Therapeutic Drug Classes .....	12
Trend Summary Analysis .....	13
Cost per Claim per User Trend Summary .....	13
Seroquel XR® Trend Summary.....	14
Previous Trend Summary .....	14
<b>Conclusion .....</b>	<b>15</b>
<b>Appendix A – Drugs by Class .....</b>	<b>16</b>

## List of Tables and Figures

Table 1: FFS Program Summary for SFY 2017 Compared to SFY 2016, SFY 2015, and SFY 2014 .....	1
Table 2: Top 20 FFS Therapeutic Drug Classes Based on Number of Claims .....	8
Table 3: Top 20 FFS Therapeutic Drug Classes Based on Claims Cost .....	9
Table 4: Top 5 ADAPD Therapeutic Drug Classes Based on Number of Claims .....	10
Table 5: Top 5 ADAPD Therapeutic Drug Classes Based on Claims Cost .....	10
Table 6: Top 5 TXIX Therapeutic Drug Classes Based on Number of Claims .....	11
Table 7: Top 5 TXIX Therapeutic Drug Classes Based on Claims Cost .....	11
Table 8: Top 5 MKN Therapeutic Drug Classes Based on Number of Claims .....	12
Table 9: Top 5 MKN Therapeutic Drug Classes Based on Claims Cost .....	12
Table 10: Seroquel XR® Summary .....	14
Table 11: Past Years' Totals .....	15
Figure 1: All FFS Users, Claims, and Claims Cost per Month for SFY 2017 .....	2
Figure 2: TXIX Users, Claims, and Claims Cost per Month for SFY 2017 .....	3
Figure 3: ADAPD Users, Claims, and Claims Cost per Month for SFY 2017 .....	3
Figure 4: MKN Users, Claims, and Claims Cost per Month for SFY 2017 .....	4
Figure 5: ADAPD, TXIX, and MKN Share of SFY 2017 FFS Claims .....	5
Figure 6: ADAPD, TXIX, and MKN Share of SFY 2017 FFS Claims Cost .....	5
Figure 7: ADAPD, TXIX, and MKN Share of FFS Claims for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017 .....	6
Figure 8: ADAPD, TXIX, and MKN Share of FFS Claims Cost for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017 .....	6
Figure 9: Cost per Claim and Cost per User .....	13

---

## Introduction

This *Program Assessment* report prepared for the Kansas Medical Assistance Program (KMAP) provides analysis of trends in drug utilization for KMAP in State Fiscal Year (SFY) 2017. Included in the analysis are the overall drug claims and expenditures as well as claims and expenditures broken down by program type and therapeutic drug class.

This analysis identifies where changes in utilization and expenditures occurred during SFY 2017 to help KMAP identify areas in which fee-for-service (FFS) management and interventions may be useful.

---

## Claims Totals

SFY 2017 includes FFS beneficiaries enrolled in the AIDS Drug Assistance Program (ADAPD), MediKan (MKN), and Title 19 Medicaid (TXIX).

**Table 1** contains the FFS summary of totals for SFY 2017 (July 1, 2016–June 30, 2017) compared to SFY 2016 (July 1, 2015–June 30, 2016), SFY 2015 (July 1, 2014–June 30, 2015), and SFY 2014 (July 1, 2013–June 30, 2014).

	SFY 2017	SFY 2016	SFY 2015	SFY 2014
Total Expenditures	\$10,391,867	\$8,096,516	\$9,911,032	\$14,678,118
Total Claims	52,518	45,358	47,098	52,343
Total Members	19,098	33,464	11,193	9,717
Total Users	2,842	1,729	2,428	2,491
Cost Per Member	\$544	\$242	\$886	\$1,511
Cost Per User	\$3,657	\$4,682	\$4,082	\$5,892
Cost Per Claim	\$198	\$178	\$210	\$280

**Table 1: FFS Program Summary for SFY 2017 Compared to SFY 2016, SFY 2015, and SFY 2014**

For dates of service from July 1, 2016 through June 30, 2017 (SFY 2017), KMAP paid over 50,000 prescription claims for FFS members and over \$10 million (rebates not included for TXIX and ADAPD) to retail pharmacies for KMAP prescriptions. Compared to SFY 2016, there was a 28% increase in total expenditures and 16% increase in total claims, while total users increased 64%. The cost per claim increased by \$20 per claim (11%).

## Overall Program Totals

Several member eligibility types remain in FFS. The three main types with pharmacy coverage include Title 19 (TXIX), MediKan (MKN), and AIDS Drug Assistance Program (ADAPD).

### FFS Program Types

**TXIX**, or Medicaid, is the health insurance program that helps low income people pay for health services including preventative, primary, and acute health services for individuals, children, and families.

**Note: Most TXIX beneficiaries are assigned to one of the KanCare (KC) MCOs, but specific system-designed logic exists that will exclude a beneficiary from being assigned to an MCO completely or for a particular time period. Exclusions are typically related to the type of eligibility, living arrangement type, or timing of retroactive eligibility.**

**MKN** is the state-funded health insurance program for adults 18 years or older and covers fewer services than Medicaid.

**ADAPD** is the program that covers the cost of medications dispensed by a retail pharmacy for those enrolled individuals who have AIDS or are HIV positive.

Figure 1 shows the number of users, claims, and claims cost for all of FFS by month for SFY 2017.

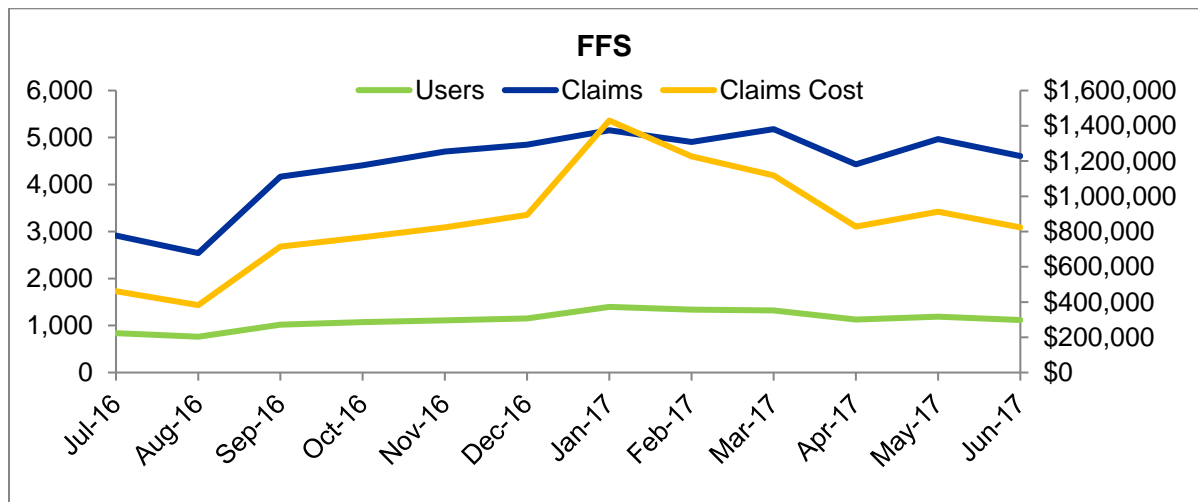
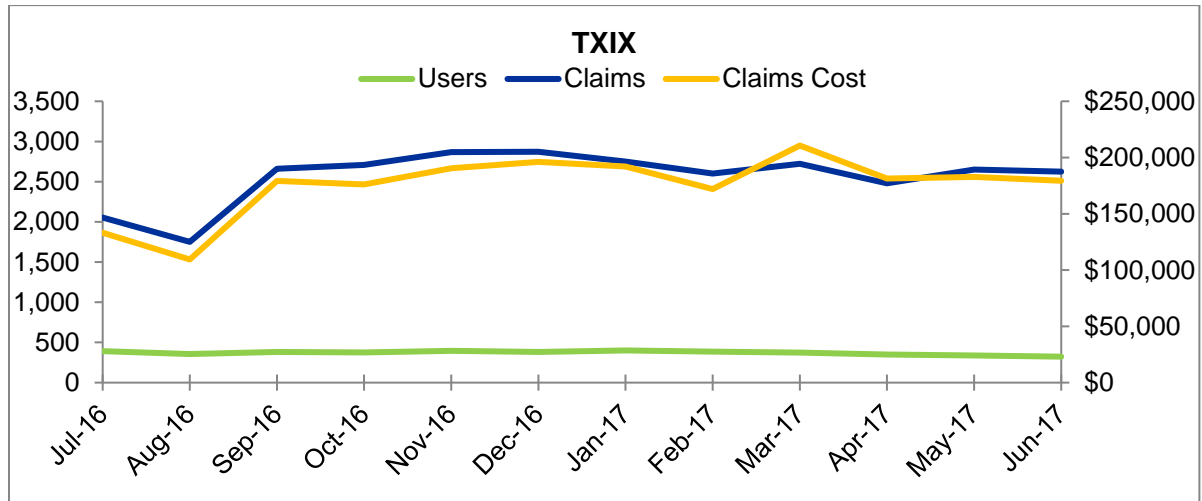


Figure 1: All FFS Users, Claims, and Claims Cost per Month for SFY 2017

In SFY 2017, claims cost per month had an increase starting September 2016. There was marked variability in claims cost, with a spike in January 2017. A review of claims data did not identify any specific causes for this change. It is likely a ripple effect from increased users and number of claims, which appears to be a trend in the data each year.

## TXIX Program Totals

**Figure 2** shows the number of users, claims, and claims cost for TXIX by month for SFY 2017.

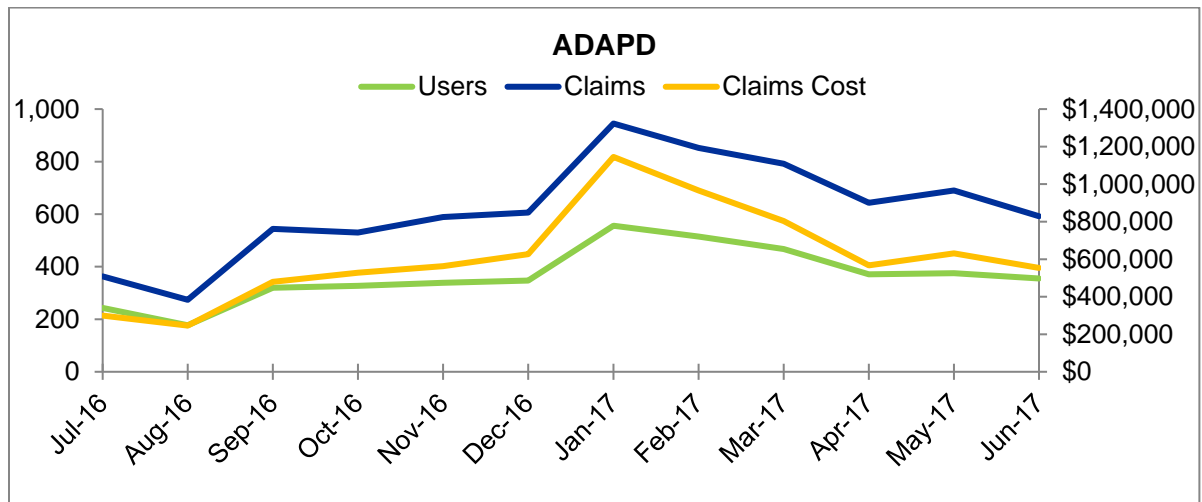


**Figure 2: TXIX Users, Claims, and Claims Cost per Month for SFY 2017**

For TXIX, the number of claims remained fairly steady during SFY 2017. The claims and claims cost had a low point occurring in August 2016. A review of claims data found a marked decrease in utilization of brand name Seroquel XR® due to increased utilization of generic quetiapine ER.

## ADAPD Program Totals

**Figure 3** shows the number of users, claims, and claims cost for ADAPD by month for SFY 2017.

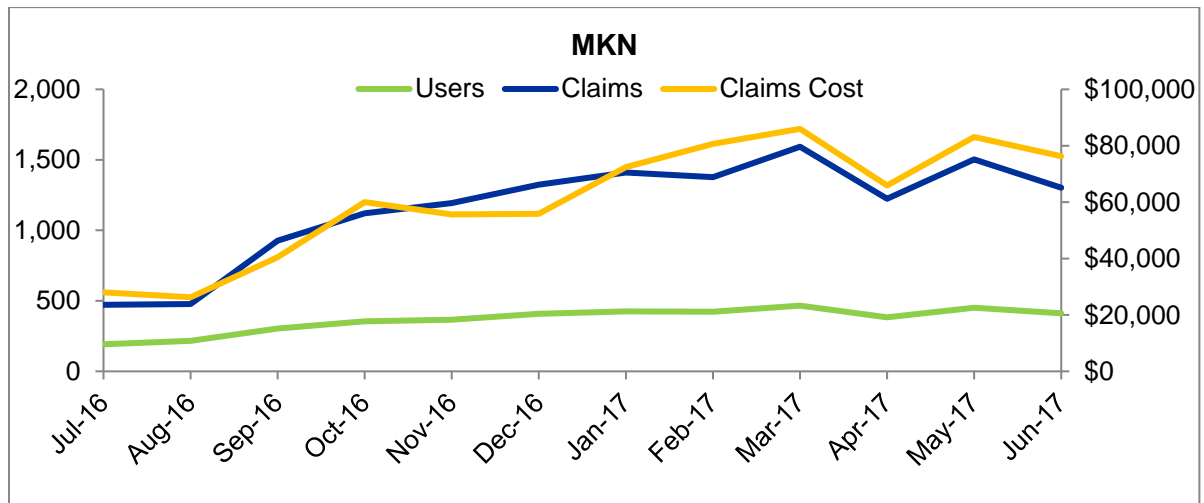


**Figure 3: ADAPD Users, Claims, and Claims Cost per Month for SFY 2017**

The number of users, claims, and claims cost were variable overall during SFY 2017. There was a sharp change in January 2017, when users, claims and claims cost increased dramatically. This is likely a ripple effect from an increase in users (over 300 new beneficiaries).

## MKN Program Totals

**Figure 4** shows the number of users, claims, and claims cost for MKN by month for SFY 2017.

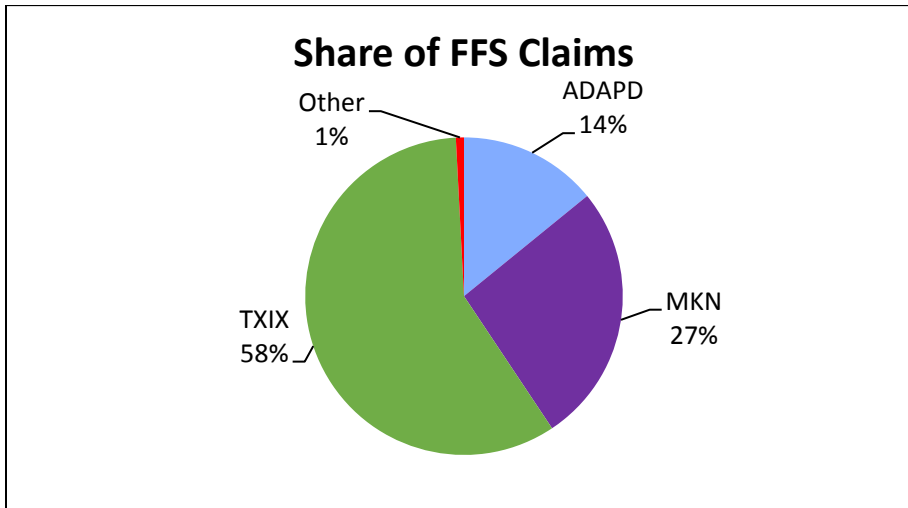


**Figure 4: MKN Users, Claims, and Claims Cost per Month for SFY 2017**

The MKN claims and claims cost steadily increased throughout the SFY. A review of claims data did not identify any specific causes for this change. However, the increase in claims and claims cost was proportionate to the increase in users.

## Share of FFS Claims and Claims Cost

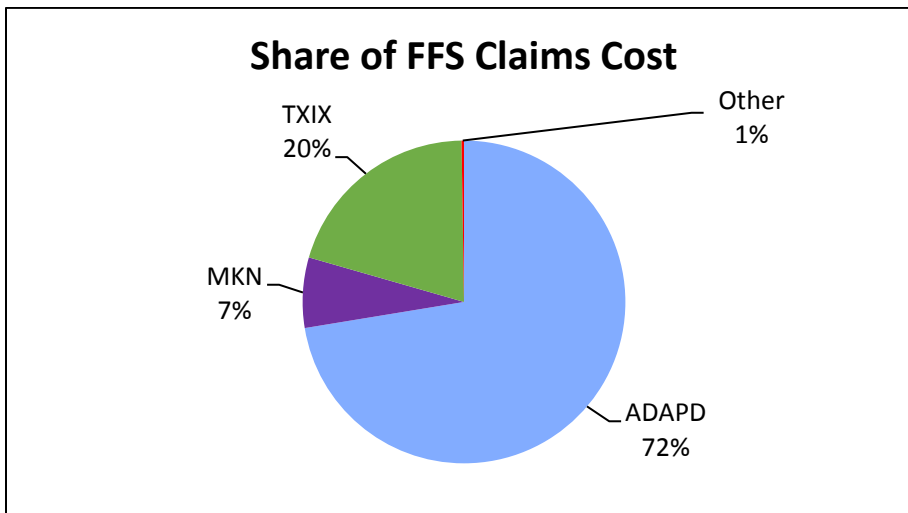
**Figure 5** shows the share of FFS claims for ADAPD, TXIX, and MKN for SFY 2017.



**Figure 5: ADAPD, TXIX, and MKN Share of SFY 2017 FFS Claims**

During SFY 2017, the TXIX program had 30,743 claims, which accounted for 58% of the 52,518 FFS claims paid. The MKN program accounted for 27%. The ADAPD program accounted for 14%. The remaining 1% of FFS claims come from other coverage plans in the FFS population.

**Figure 6** shows the share of FFS claims cost for ADAPD, TXIX, and MKN for SFY 2017.



**Figure 6: ADAPD, TXIX, and MKN Share of SFY 2017 FFS Claims Cost**

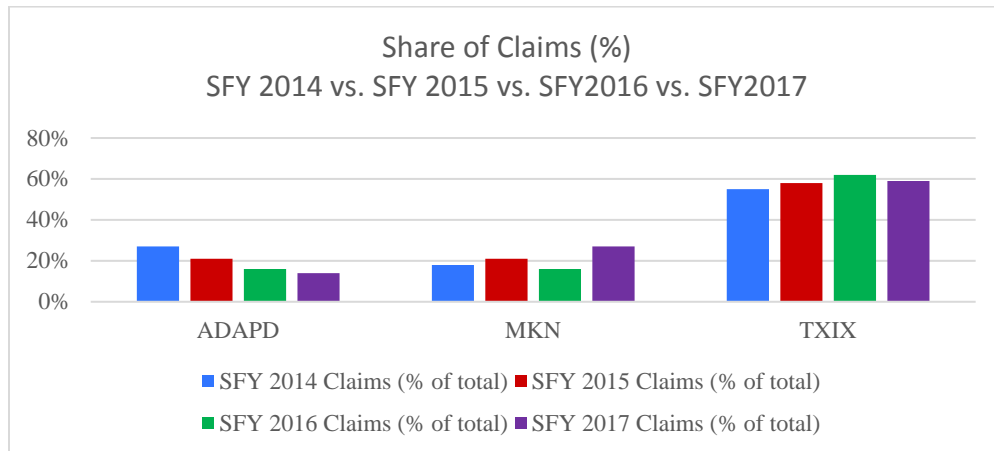
While the ADAPD program only accounted for 14% of the claims paid for FFS, it accounted for 72% of the total claims cost. During SFY 2017, over \$10 million was paid for FFS claims, with over \$7 million going toward ADAPD claims. The TXIX program accounted for 58% of the FFS claims paid but only 20% of the claims cost during SFY 2017. The MKN program accounted for 27% of the FFS claims and 7% of the claims cost during SFY 2017. The remaining 1% of FFS claims costs come from other coverage plans in the FFS population.



## Comparison of Share of FFS Claims and Claims Cost Post-KanCare

Below are graphical representations of share of claims and claims cost for the three main FFS programs from SFY 2014 through SFY 2017.

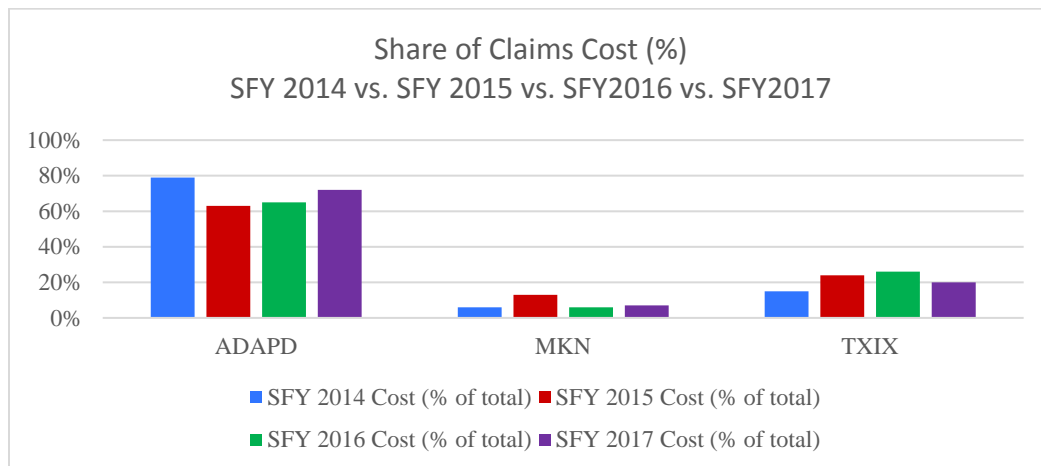
**Figure 7** shows the share of FFS claims for ADAPD, TXIX, and MKN for SFY 2014, SFY 2015, SFY 2016, and SFY 2017.



**Figure 7: ADAPD, TXIX, and MKN Share of FFS Claims for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017**

The TXIX program continues to provide the highest number and percentage of claims for the FFS program. ADAPD claims decreased slightly, while MKN claims increased 69% compared to the prior SFY.

**Figure 8** shows the share of claims cost of FFS claims for ADAPD, TXIX, and MKN for SFY 2014, SFY 2015, SFY 2016, and SFY 2017.



**Figure 8: ADAPD, TXIX, and MKN Share of FFS Claims Cost for SFY 2014 versus SFY 2015 versus SFY 2016 versus SFY 2017**

The ADAPD program continues to provide the highest percentage of claims cost for the FFS program. MKN and TXIX percentage of claims cost remain consistent from prior SFYs, with only small variations occurring.

---

## Drug Classification Reporting

It is important not only to report the number of beneficiaries, number of claims, and claims cost by yearly and monthly totals but also to look at trends by therapeutic drug classes.

Therapeutic drug class reporting is based on the American Hospital Formulary Service (AHFS) Pharmacologic-Therapeutic Classification third hierarchy level. An example of the AHFS classification (for Central Nervous System Agents) is shown below. Reporting is done at the third hierarchy level (antipsychotics are provided as an example in the table below).

AHFS Pharmacologic-Therapeutic Classification Hierarchy Example	
28:00 Central Nervous System Agents	
28:16 Psychotherapeutic Agents	
28:16.08 Antipsychotics*	
28:16.08.04 Atypical Antipsychotics	
28:16.08.08 Butyrophenones	
28:16.08.24 Phenothiazines	
28:16.08.32 Thioxanthenes	
28:16.08.92 Antipsychotics, Miscellaneous	

\*Therapeutic classes are reported at this level.

The number of claims and share of claims for the overall FFS population, as well as the sub-groups, are shown to identify differences in the programs. Likewise, the claims cost and share of claims cost for the different programs are shown to identify differences in program spend.

## FFS Top Therapeutic Drug Classes

**Table 2** reports the top 20 therapeutic drug classes by number of claims for the entire FFS population. See [Appendix A](#) for a list of drugs with utilization in SFY 2017 included in each class. The number of claims used to calculate the share of claims was 52,518.

AHFS Therapeutic Class	Claims	Share of Total Claims (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	6,206	11.82	949	\$1,167
ANTIPSYCHOTIC AGENTS	5,483	10.44	484	\$272
ANTIDEPRESSANTS	4,769	9.08	815	\$12
ANTICONVULSANTS, MISCELLANEOUS	3,749	7.14	427	\$32
CATHARTICS AND LAXATIVES	3,723	7.09	249	\$9
SECOND GENERATION ANTIHISTAMINES	2,462	4.69	218	\$6
HMG-COA REDUCTASE INHIBITORS	1,541	2.93	310	\$7
ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	1,342	2.56	290	\$4
BETA-ADRENERGIC BLOCKING AGENTS	1,265	2.41	283	\$7
NONSTEROIDAL ANTI-INFLAMMATORY AGENTS	1,205	2.29	387	\$6
THYROID AGENTS	1,201	2.29	175	\$12
ANTICHOLINERGIC AGENTS (CNS)	1,057	2.01	111	\$10
INSULINS	850	1.62	124	\$357
BENZODIAZEPINES (ANTICONVULSANTS)	815	1.55	157	\$58
BIGUANIDES	806	1.53	162	\$5
PROTON-PUMP INHIBITORS	769	1.46	96	\$8
OPIATE AGONISTS	692	1.32	137	\$39
BENZODIAZEPINES (ANXIOLYTIC, SEDATIV/HYP)	577	1.10	125	\$7
DIHYDROPYRIDINES	552	1.05	129	\$4
BETA-ADRENERGIC AGONISTS	514	0.98	235	\$51

**Table 2: Top 20 FFS Therapeutic Drug Classes Based on Number of Claims**

Antiretrovirals made up the highest utilized drug class for the entire FFS population with 11.82% of all FFS claims, followed by antipsychotic agents with 10.44% of all FFS claims.

Antipsychotic utilization and expenditures remained fairly steady throughout SFY 2017. Historically, antipsychotic agents have made up a large portion of the FFS expenditures and utilization. Compared to SFY 2016, the top five classes remained the same for number of claims. Dihydropyridines are new to the list for the current fiscal year.

**Table 3** reports the top 20 therapeutic drug classes by claims cost for the entire FFS population. The claims cost used to calculate the share of claims cost was \$10,391,867.

AHFS Therapeutic Class	Claims Cost	Share of Total Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	\$7,243,472	69.70	949	\$1,167
ANTIPSYCHOTIC AGENTS	\$1,491,898	14.36	484	\$272
INSULINS	\$303,759	2.92	124	\$357
ANTIMALARIALS	\$233,084	2.24	14	\$5,421
ANTICONVULSANTS, MISCELLANEOUS	\$119,900	1.15	427	\$32
CORTICOSTEROIDS (RESPIRATORY TRACT)	\$95,790	0.92	73	\$343
IMMUNOMODULATORY AGENTS	\$67,395	0.65	2	6,740
ANTIMUSCARINICS/ANTISPASMODICS	\$61,202	0.59	76	\$163
ANTIDEPRESSANTS	\$57,284	0.55	815	\$12
NUCLEOSIDES AND NUCLEOTIDES	\$54,273	0.52	84	\$244
BENZODIAZEPINES (ANTICONVULSANTS)	\$46,976	0.45	157	\$58
CATHARTICS AND LAXATIVES	\$33,246	0.32	249	\$9
OPIATE AGONISTS	\$27,327	0.26	137	\$39
DISEASE-MODIFYING ANTIRHEUMATIC AGENTS	\$27,214	0.26	1	\$3,888
BETA-ADRENERGIC AGONISTS	\$26,302	0.25	235	\$51
ANTICOAGULANTS	\$25,176	0.24	39	\$138
DIPEPTIDYL PEPTIDASE-4 (DPP-4) INHIBITORS	\$22,290	0.21	14	\$437
ANTIEMETICS, MISCELLANEOUS	\$18,884	0.18	30	\$262
ANTIMUSCARINICS	\$18,646	0.18	30	\$57
CENTRAL NERVOUS SYSTEM AGENTS, MISC.	\$18,214	0.18	10	\$552

**Table 3: Top 20 FFS Therapeutic Drug Classes Based on Claims Cost**

Antiretrovirals made up the drug class with the highest cost for the entire FFS population with 69.7% of all FFS claims cost, followed by antipsychotic agents with 14.36% of all FFS claims cost.

New therapies on this list are immunomodulatory agents and central nervous system agents.

## ADAPD Top Therapeutic Drug Classes

**Table 4** reports the top five therapeutic drug classes by number of claims for the ADAPD population based on number of claims for SFY 2017. The number of claims used to calculate the share of claims was 7,420.

AHFS Therapeutic Class	Claims	Share of Total ADAPD Claims (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	6,157	82.98	945	\$1,166
SULFONAMIDES (SYSTEMIC)	314	4.23	107	\$27
MACROLIDES	199	2.68	86	\$18
NUCLEOSIDES AND NUCLEOTIDES	157	2.12	55	\$341
ANTIDEPRESSANTS	114	1.54	342	\$9

**Table 4: Top 5 ADAPD Therapeutic Drug Classes Based on Number of Claims**

**Table 5** reports the top five therapeutic drug classes by claims cost for the ADAPD population. The claims cost used to calculate the share of claims cost was \$7,524,897.

AHFS Therapeutic Class	Claims Cost	Share of Total ADAPD Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIRETROVIRALS	\$7,179,756	95.41	945	\$1,166
ANTIMALARIALS	\$231,267	3.07	3	\$17,890
NUCLEOSIDES AND NUCLEOTIDES	\$58,475	0.78	55	\$341
ANTIEMETICS, MISCELLANEOUS	\$18,585	0.25	29	\$273
AZOLES	\$17,529	0.23	44	\$183

**Table 5: Top 5 ADAPD Therapeutic Drug Classes Based on Claims Cost**

Antiretrovirals rank as the top utilized and most expensive drug class for ADAPD. Antiretrovirals made up 95.41% of the total claims cost and 82.98% of the total claims for the ADAPD. As for expenditures for ADAPD, antimalarials were the second most expensive therapy per claim after antiretrovirals for the top five drug classes based on claims cost.

## TXIX Top Therapeutic Drug Classes

**Table 6** reports the top five therapeutic drug classes by number of claims for the TXIX population based on number of claims for SFY 2017. The number of claims used to calculate the share of claims was 30,743.

AHFS Therapeutic Class	Claims	Share of Total TXIX Claims (%)	Beneficiaries	Cost/Claim
ANTIPSYCHOTIC AGENTS	4,400	14.31	211	\$277
CATHARTICS AND LAXATIVES	3,676	11.96	232	\$9
ANTICONVULSANTS, MISCELLANEOUS	2,689	8.75	168	\$37
SECOND GENERATION ANTIHISTAMINES	2,440	7.94	211	\$6
ANTIDEPRESSANTS	2,027	6.59	181	\$15

**Table 6: Top 5 TXIX Therapeutic Drug Classes Based on Number of Claims**

**Table 7** reports the top five therapeutic drug classes by claims cost for the TXIX population. The claims cost used to calculate the share of claims cost was \$2,110,377.

AHFS Therapeutic Class	Claims Cost	Share of Total TXIX Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIPSYCHOTIC AGENTS	\$1,217,883	57.71	211	\$277
INSULINS	\$142,814	6.77	46	\$291
ANTICONVULSANTS, MISCELLANEOUS	\$98,868	4.68	168	\$37
CORTICOSTEROIDS (RESPIRATORY TRACT)	\$72,654	3.44	31	\$348
ANTIRETROVIRALS	\$55,238	2.62	11	\$1,347

**Table 7: Top 5 TXIX Therapeutic Drug Classes Based on Claims Cost**

For the TXIX program, antipsychotic agents made up 14.31% of claims and 57.71% of the claims cost. Historically, antipsychotic agents have always made up a large portion of drug expenditures. Antiretrovirals accounted for the most expensive of the top five therapeutic drug classes based on cost per claim.

## MKN Top Therapeutic Drug Classes

**Table 8** reports the top five therapeutic drug classes by number of claims for the MKN population based on number of claims for SFY 2017. The number of claims used to calculate the share of claims was 13,924.

AHFS Therapeutic Class	Claims	Share of Total MKN Claims (%)	Beneficiaries	Cost/Claim
ANTIDEPRESSANTS	2,583	18.55	589	\$9
ANTIPSYCHOTIC AGENTS	1,077	7.73	273	\$254
ANTICONVULSANTS, MISCELLANEOUS	1,048	7.53	258	\$20
HMG-COA REDUCTASE INHIBITORS	839	6.03	226	\$6
ANGIOTENSIN-CONVERTING ENZYME INHIBITORS	784	5.63	225	\$3

**Table 8: Top 5 MKN Therapeutic Drug Classes Based on Number of Claims**

Antidepressant agents made up the highest number of claims at 18.55%, followed by antipsychotic agents at 7.73% of claims.

**Table 9** reports the top five therapeutic drug classes by claims cost for the MKN population. The claims cost used to calculate the share of claims cost was \$731,523.

AHFS Therapeutic Class	Claims Cost	Share of Total MKN Claims Cost (%)	Beneficiaries	Cost/Claim
ANTIPSYCHOTIC AGENTS	\$273,951	37.45	273	\$254
INSULINS	\$159,394	21.79	77	\$451
IMMUNOMODULATORY AGENTS	\$67,395	9.21	2	\$6,740
ANTIDEPRESSANTS	\$24,999	3.42	589	\$10
CORTICOSTEROIDS (RESPIRATORY TRACT)	\$23,136	3.16	42	\$331

**Table 9: Top 5 MKN Therapeutic Drug Classes Based on Claims Cost**

Antipsychotic agents accounted for 37.45% of the claims cost for MKN for SFY 2017. Insulins were the second most expensive agent, based on cost per claim, for all MKN claims.

## Trend Summary Analysis

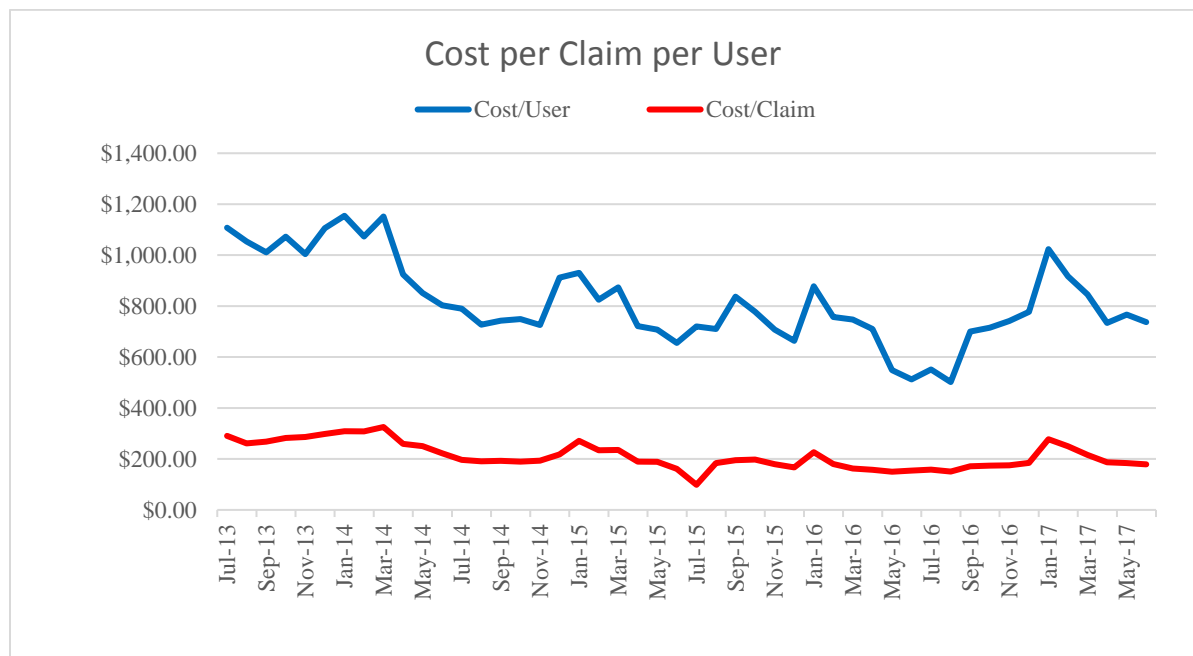
Trending of FFS data over the past several years has become challenging due to the implementation of KanCare. On January 1, 2013, the majority of FFS members were transitioned to KanCare and enrolled in one of three managed care organizations (MCOs). The remaining FFS population has ADAPD, MKN or TXIX coverage. These three coverage plans cannot be compared to one another due to the limited and targeted prescription drug coverage for ADAPD and MKN versus a more broad coverage for TXIX. Other factors that impact trending for this smaller FFS population includes 340B pricing and third party payer payments which lowers actual cost.

In prior SFYs, cost savings could be directly seen by emergence of FDA-approved generically equivalent formulations of highly-utilized, costly medications (i.e., nevirapine in SFY14 and aripiprazole in SFY15 and SFY16). SFY17 focuses on the variable cost per claim per user. Additionally, the recent introduction of generic Seroquel XR® (quetiapine ER) to the market poses a potential cost savings.

### Cost per Claim per User Trend Summary

Since the transition to KanCare, cost per user and cost per claim have been variable throughout the FFS population. Below is a figure showing average claims and cost.

**Figure 9** shows cost per claim compared to the cost per user.



**Figure 9: Cost per Claim and Cost per User**

Claims, users, and claims cost invariably increase at the beginning of each calendar year (January). A downward shift is seen throughout the rest of the year. Consecutively, the average cost per claim is decreased compared to the previous year, with exception of SFY17. Although the total number of covered beneficiaries decreased during SFY17, there was a 64% increase of total users compared to SFY16, which is likely causing the cost per claim and cost per user to slightly increase.



## Seroquel XR® Trend Summary

On November 1, 2016, a generic for Seroquel XR® 400 mg was approved by the US Food and Drug Administration (FDA). Subsequently, on May 9, 2017 additional manufacturers were approved for the remaining strengths. An increase in cost savings was noted; it is expected to increase further during SFY18.

**Table 10** shows the number of beneficiaries, claims, claims cost, and average cost per claim for Seroquel XR® and quetiapine ER for SFY 2017.

Beneficiaries		Claims		Claims Cost		Cost/Claim	
Brand	Generic	Brand	Generic	Brand	Generic	Brand	Generic
14	17	141	135	\$68,289	\$39,896	\$484	\$296

**Table 10: Seroquel XR® Summary**

## Previous Trend Summary

During the SFY14 annual report, the generic nevirapine was released and a decrease in cost was noted. Since then a decrease in usage has been seen, also. Throughout SFY17, there were a total of 66 claims, which have all been for the generic product. This is compared to 205 claims during the SFY14. Although a definitive reason has not been identified, this decreased utilization may be due to one of several things. One being that other Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTIs) have a better safety profile and efficacy. According to the AIDSinfo Clinical Guidelines, there is a greater risk of symptomatic hepatic events, including serious and life-threatening events, observed in ARV-naïve women with CD4 counts greater than 250 cells/mm<sup>3</sup> or in ARV-naïve men with CD4 counts greater than 400 cells/mm<sup>3</sup>. In the same guidelines, high-level of resistance to all NNRTIs (except etravirine) may occur with a single mutation. Secondly, an option is that more combination agents have become commercially available, which may help with pill burden and compliance. Lastly, there is likely a shift to newer--more costly--agents.

During the SFY15, the generic oral aripiprazole was released. Due to the availability of the generic medication being available in late SFY15, it was revisited in the SFY16 report. The cost savings was tenfold. Prior to the generic oral formulation being available, an average cost per claim was as high as \$1,060 for brand name Abilify®. At the end of SFY16, the average cost per claim for the generic aripiprazole was \$141. With the large number of beneficiaries on the medication, the cost savings has continued throughout SYF17. The generic formulation accounts for 100 percent of claims for oral aripiprazole.

## Conclusion

During SFY 2017, overall utilization and expenditures increased for the FFS population from the previous SFY.

Between SFY 2016 and SFY 2017, the average cost per claim began to increase. Although there was not a particular medication identified for this change, there were new medications introduced into the market that accounted for increases in utilization to higher costing agents, specifically new agents to the insulin and antiretroviral classes. The increased utilization of high cost agents within an existing drug class likely contributed to the overall increase in cost per claim for SFY 2017.

The average cost/claim continues to remain higher than pre-KanCare levels due to the majority of FFS claims cost being attributed to ADAPD and the program's select coverage and high-cost medications. Pre-KanCare, the majority of claims was attributed to TXIX, which covers a broad range of medications and medication costs.

**Table 12** shows the FFS claims cost, number of claims, and average members per month for the past nine years.

Period Covered	Claims Cost	Claims	Average Cost/Claim
SFY 2017	\$10,391,867	52,518	\$197.87
SFY 2016	\$8,096,516	45,358	\$178.50
SFY 2015	\$9,911,032	47,098	\$210.43
SFY 2014	\$14,678,118	52,343	\$280.42
SFY 2013	\$90,994,439	1,110,050	\$81.97
SFY 2012	\$176,615,977	2,156,498	\$81.90
SFY 2011	\$172,298,691	2,177,286	\$79.13
SFY 2010	\$161,952,882	2,098,289	\$77.18
SFY 2009	\$175,149,636	2,040,759	\$85.83

**Table 11: Past Years' Totals**

## Appendix A – Drugs by Class\*

### Angiotensin-Converting Enzyme Inhibitors

Benazepril  
Benazepril/Amlodipine  
Benazepril/Hydrochlorothiazide  
Captopril  
Captopril/Hydrochlorothiazide  
Enalapril  
Enalapril/Hydrochlorothiazide  
Fosinopril  
Fosinopril/Hydrochlorothiazide  
Lisinopril  
Lisinopril/Hydrochlorothiazide  
Moexipril  
Moexipril/Hydrochlorothiazide  
Monopril  
Monopril/Hydrochlorothiazide  
Perindopril  
Quinapril  
Quinapril/Hydrochlorothiazide  
Ramipril  
Trandolapril  
Trandolapril/Verapamil

### Anticholinergic Agents (CNS)

Benztropine  
Biperiden  
Procyclidine  
Trihexyphenidyl

### Anticoagulants

Apixaban  
Dabigatran  
Edoxaban  
Enoxaparin  
Heparin  
Rivaroxaban  
Warfarin

### Anticonvulsants, Misc.

Carbamazepine  
Eslicarbazepine  
Divalproex  
Gabapentin  
Lacosamide  
Lamotrigine  
Levetiracetam  
Oxcarbazepine  
Pregabalin  
Topiramate  
Valproic Acid  
Zonisamide

### Antidepressants

Amitriptyline  
Bupropion  
Citalopram  
Clomipramine  
Desipramine  
Desvenlafaxine  
Doxepin  
Duloxetine  
Escitalopram  
Fluoxetine  
Fluvoxamine  
Imipramine  
Mirtazapine  
Nortriptyline  
Olanzapine/fluoxetine  
Paroxetine  
Sertraline  
Trazodone  
Venlafaxine  
Vilazodone

### Antiemetics, Miscellaneous

Dronabinol  
Scopolamine

### Antimalarials

Hydroxychloroquine  
Pyrimethamine

### Antimuscarinics

Darifenacin  
Fesoterodine  
Oxybutynin  
Solifenacin

### Antimuscarinics/ Antispasmodics

Dicyclomine  
Glycopyrrolate  
Ipratropium  
Ipratropium/Albuterol  
Methscopolamine  
Tiotropium

### Antipsychotic Agents

Aripiprazole  
Asenapine  
Bexpiprazole  
Cariprazine  
Chlorpromazine  
Clozapine  
Fluphenazine  
Haloperidol  
Iloperidone  
Loxapine

Lurasidone  
Olanzapine  
Paliperidone  
Perphenazine  
Quetiapine  
Risperidone  
Thioridazine  
Trifluoperazine  
Ziprasidone

### Antiretrovirals

Abacavir  
Abacavir/Lamivudine  
Abacavir/Dolutegravir/  
Lamivudine  
Atazanavir  
Atazanavir/Cobicistat  
Darunavir  
Darunavir/Cobicistat  
Didanosine  
Dolutegravir  
Efavirenz  
Efavirenz/Emtricitabine/Tenofovir  
Elvitegravir/Cobicistat/  
Emtricitabine/Tenofovir  
Emtricitabine  
Emtricitabine/Tenofovir  
Emtricitabine/Rilpivirine/Tenofovir  
Enfuvirtide  
Etravirine  
Fosamprenavir  
Indinavir  
Lamivudine  
Lamivudine/Zidovudine  
Lopinavir/Ritonavir  
Nelfinavir  
Nevirapine  
Raltegravir  
Rilpivirine  
Ritonavir  
Tenofovir  
Tipranavir  
Zidovudine

### Azoles

Fluconazole  
Itraconazole  
Ketoconazole

### Benzodiazepines (Anticonvulsants)

Clobazam  
Clonazepam

### **Benzodiazepines (Anxiolytic, Sedatives & Hypnotics)**

Alprazolam  
Diazepam  
Lorazepam  
Temazepam

### **Beta-Adrenergic Agonists**

Albuterol  
Salmeterol

### **Beta-Adrenergic Blocking Agents**

Atenolol  
Atenolol/Chlorthalidone  
Bisoprolol/Hydrochlorothiazide  
Carvedilol  
Metoprolol  
Nadolol  
Propranolol  
Sotalol

### **Biguanides**

Metformin

### **Cathartics and Laxatives**

Bisacodyl  
Calcium Polycarbophil  
Docusate  
Glycerin  
Lubiprostone  
Magnesium Hydroxide  
Magnesium Citrate  
Methylcellulose  
Polyethylene Glycol 3350  
Psyllium  
Sennosides  
Sennosides/Docusate

### **Central Nervous System Agents, Miscellaneous**

Atomoxetine  
Dextromethorphan/Quinidine  
Memantine

### **Corticosteroids (Respiratory Tract)**

Beclomethasone  
Budesonide  
Budesonide/Formoterol  
Fluticasone

Fluticasone/Salmeterol  
Mometasone/Formoterol

### **Dihydropyridines**

Amlodipine  
Amlodipine/Benazepril  
Nifedipine

### **Dipeptidyl Peptidase-4 (DDP-4) Inhibitors**

Linagliptin  
Saxagliptin  
Sitagliptin

### **Disease-Modifying Antirheumatic Agents**

Adalimumab

### **HMG-CoA Reductase Inhibitors**

Atorvastatin  
Lovastatin  
Pravastatin  
Rosuvastatin  
Simvastatin

### **Immunomodulatory Agents**

Fingolimod  
Terifunomide

### **Insulins**

Insulin Aspart  
Insulin Aspart Protamine/Aspart  
Insulin Degludec  
Insulin Detemir  
Insulin Glargine  
Insulin Lispro  
Insulin NPH  
Insulin NPH/Regular  
Insulin Regular

### **Macrolides**

Azithromycin  
Clarithromycin  
Erythromycin  
Fidaxomicin

### **Nonsteroidal Anti-Inflammatory Agents**

Aspirin  
Celecoxib  
Diclofenac  
Diclofenac/Misoprostol  
Etodolac  
Ibuprofen  
Indomethacin  
Ketorolac  
Mefenamic acid  
Meloxicam  
Nabumetone  
Naproxen  
Piroxicam  
Sulindac

### **Nucleosides & Nucleotides**

Acyclovir  
Valacyclovir  
Valganciclovir

### **Opiate Agonists**

Codeine/Acetaminophen  
Fentanyl  
Hydrocodone/Acetaminophen  
Methadone  
Morphine  
Oxycodone  
Oxycodone/Acetaminophen  
Tramadol  
Tramadol/Acetaminophen

### **Proton-Pump Inhibitors**

Lansoprazole  
Omeprazole  
Pantoprazole

### **Second Generation**

#### **Antihistamines**

Cetirizine  
Loratadine

#### **Sulfonamides (Systemic)**

Sulfadiazine  
Sulfamethoxazole/Trimethoprim  
Sulfasalazine

#### **Thyroid Agents**

Levothyroxine  
Liothyronine

\* This list only includes agents with claims during SFY 2017.